



International

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## Circular economy — Product circularity data sheet

*Économie circulaire — Fiche de données de circularité des produits*

**ISO 59040**

**First edition  
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This document was prepared by Technical Committee ISO/TC 323, *Circular economy*.

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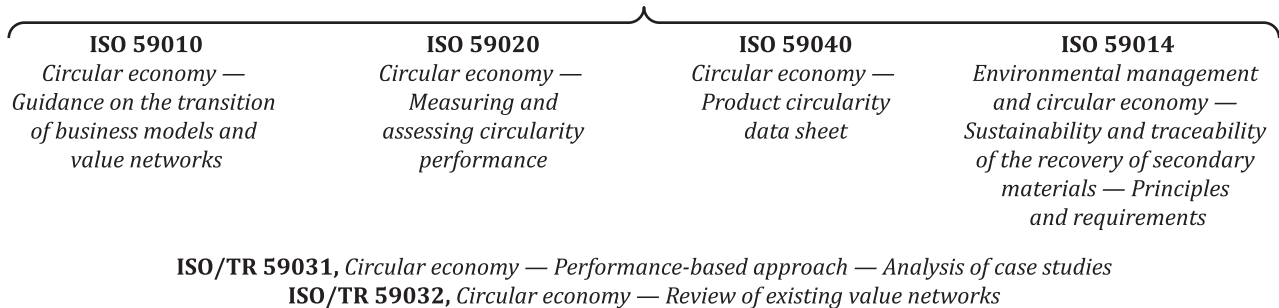
The global economy is “linear” as it is mainly based on extraction, production, use and disposal. This linear economy leads to resource depletion, biodiversity loss, waste and harmful losses and releases, all of which collectively are causing serious damage to the capacity of the planet to continue to provide for the needs of future generations.<sup>[49]</sup> Moreover, several planetary boundaries have already been reached or exceeded.

There is an increased understanding that a transition towards an economy that is more circular, based on a circular use of resources, can contribute to meeting current and future human needs (welfare, housing, nutrition, healthcare, mobility, etc.). Transitioning towards a circular economy can also contribute to the creation and sharing of more value within society and interested parties, while natural resources are managed to be replenished and renewed and in a sustainable way, securing the quality and resilience of ecosystems.

Organizations recognize many potential reasons to engage in a circular economy (e.g. delivering more ambitious and sustainable solutions; improved relationships with interested parties; more effective and efficient ways to fulfil voluntary commitments or legal requirements; engaging in climate change mitigation or adaptation; managing resource scarcity risks, increasing resilience in the environmental, social and economic systems), while contributing to satisfying human needs.

The ISO 59000 family of standards (see [Figure 1](#)) is designed to harmonize the understanding of the circular economy and to support its implementation and measurement. It also considers organizations, such as government, industry and non-profit, in contributing to the achievement of the United Nations (UN) Agenda 2030 for Sustainable Development<sup>[50]</sup>.

ISO 59004, *Circular economy — Vocabulary, principles and guidance for implementation*



**Figure 1 — ISO 59000 family of standards**

Organizations throughout the world work with suppliers to acquire products. Many organizations establish multiple supplier relationships to cover a variety of business needs, such as purchasing, development, manufacturing, sales and after sales services. Conversely, suppliers provide products to a range of acquirers.

Acquirers and suppliers willing to enter or having entered a relationship for the purpose of dealing with a variety of products should introduce the product circularity data sheet (PCDS) based on the circular economy principles described in the ISO 59000 family of standards. The PCDS is intended to provide information to support the understanding of the circularity aspects of a product, as aligned to the circular economy principles according to the ISO 59000 family of standards. The PCDS is a method of reporting on the circularity performance of a product using PCDS statements providing verifiable data.

This document:

- a) provides a general methodology for establishing, managing and maintaining a PCDS when acquiring or supplying products;
- b) specifies requirements for the reporting of information to be used when creating a PCDS template and provides guidance about managing and sharing a PCDS;

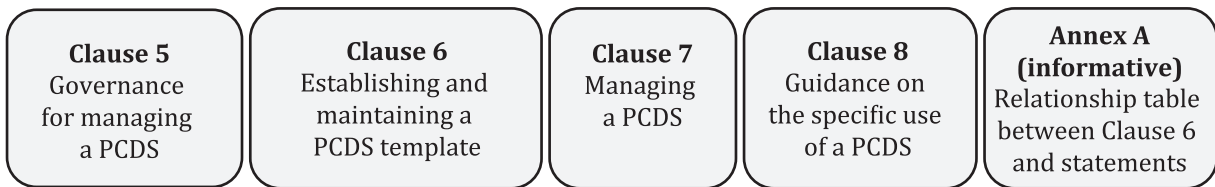
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- d) is intended to facilitate circular economy business models as specified in ISO 59010, by focusing on the exchange of circularity aspects of products (business to business relationship);
- e) is intended to be used by any organization wishing to adopt circular-economy-based practices in their supplier or acquirer relationships.

Data collected by this method can be used for digitalized product documentation.

In order to ensure the application of this document, it can be beneficial to have in place tested and mature systems that apply the specified methodology for managing product circularity data. In accordance with ISO/IEC Guide 17, suitable solutions for all sizes of enterprises should be accessible to reduce burdens. To ensure that small businesses can effectively manage the systems and conform to this document, training programmes can be established. These programmes can aim to educate small businesses on how to use the systems and understand the requirements of this document. Recognizing that small businesses require more time and resources to implement this document, a transition period can be provided.

The structure of this document is shown in [Figure 2](#).



**Figure 2 — Structure overview**

[Clause 5](#) provides acquirer and supplier guidance for successfully developing and implementing an acquirer and supplier relationship strategy and an acquirer and supplier relationship plan with the associated agreement. [Clause 5](#) also provides guidance for considering PCDS from a risk management perspective.

The guidance contained in [Clause 5](#) should be followed by an organization in the context of using a PCDS when acquiring products or when supplying them, or both.

[Clause 6](#) provides requirements and guidance for establishing and maintaining a PCDS template. It provides guidance on mandatory and additional statements that can be considered when establishing a PCDS template.

[Clause 7](#) provides requirements and guidance to suppliers on processes to produce and manage a PCDS. A supplier is providing answers to each mandatory statement of a PCDS template in order to claim conformance to this document. The additional statements and supplementary information of a PCDS template are not a requirement of this document, meaning that a supplier may claim conformance to this document without completing them.

[Clause 8](#) provides guidance on specific application and usage of a PCDS.

[Annex A](#) provides a relationship table between [Clause 6](#) and PCDS statements, which summarizes mandatory and additional statements.